

***CORYNEBACTERIUM GLUTAMICUM* GENES ENCODING PROTEINS  
INVOLVED IN MEMBRANE SYNTHESIS AND MEMBRANE TRANSPORT**

**Abstract of the Disclosure**

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Isolated nucleic acid molecules, designated MCT nucleic acid molecules, which  
encode novel MCT proteins from *Corynebacterium glutamicum* are described. The  
invention also provides antisense nucleic acid molecules, recombinant expression  
vectors containing MCT nucleic acid molecules, and host cells into which the expression  
10 vectors have been introduced. The invention still further provides isolated MCT  
proteins, mutated MCT proteins, fusion proteins, antigenic peptides and methods for the  
improvement of production of a desired compound from *C. glutamicum* based on  
genetic engineering of MCT genes in this organism.